

### **Remarks/Arguments**

Claims 18-24, and 31-39 are pending.

The Examiner rejected claims 14, 16, 18, 22-24, 31-33, and 37 under 35 USC 103(a) as being unpatentable over Chan et al. ("Chan") in view of Kayyem et al ("Kayyem"); rejected claim 15 under 35 USC 103(a) as being unpatentable over Chan in view of Kayyem and Hintsche et al.; and rejected claim 21 under 35 USC 103(a) as being unpatentable over Chan in view of Kayyem and Singh et al.

Claims 14 to 16 have been cancelled. Consequently, claims 19 and 20 have been rewritten in independent format, incorporating the subject matter of claim 14; and claims 21, 22, 24 and 37 have been amended to depend from claim 18. New claims 38 and 39 are presented for consideration, which correspond to deleted claims 15 and 16 respectively, but are dependent on claim 18 instead of claim 14. It is believed that no new matter has been added by these amendments.

Claim 18, as amended, is directed to "a method of forming an electrochemical chip" and recites a first plate which is formed by, amongst other steps, "covering at least one electrode of said electrode array with a coating doped with a ferrocene compound" and "oxidizing said ferrocene compound during said forming said electrochemical chip" (emphasis added).

It is respectfully submitted that current claim 18 is patentably distinguishable from the cited references for at least the following reasons.

The Examiner freely admits that Chan does not disclose the limitation of "covering at least one electrode of said electrode array with a coating doped with a ferrocene compound." However, the Examiner alleges that Kayyem discloses this feature and the feature that ferrocene is to be oxidized to ferrocenium. Careful review of Kayyem reveals that Kayyem discloses that ferrocene is oxidized during use of the compositions disclosed therein, not during formation of the compositions. For example, ferrocene oxidation is discussed in the context of applying a potential "to a sample containing modified nucleic acid probes" "to detect mismatches in a complementary target

sequence,” wherein “an input electron source in solution is used in the initiation of electron transfer, preferably when initiation and detection are being done using DC current” (see col. 42, ll. 9-67; col. 43, ll. 1-13, emphasis added). Kayyem does not disclose or suggest that ferrocene should be oxidized during the formation of an electrochemical chip.

It is noted that while Chan discloses that when “electronic detection is used,” the suitable techniques include “cyclic voltametry.” According to Chan the cyclic voltametry is applied during the detection operation, not during formation of the biochip (see paragraph [0150] of Chan. Also see paragraph [0140]).).

Hintsche et al. and Singh et al. also fail to cure the deficiencies of Chan and Kayyem discussed above.

Therefore, it is respectfully submitted that claim 18 is allowable over the cited references as they, either alone or in combination, fail to disclose all of the limitations of current claim 18.

Claims 21 to 24, 31 to 39 are all dependent from claim 18 directly or indirectly and are therefore also allowable over the cited references.

Withdrawal of the rejections under 35 USC 103(a) is thus respectfully requested.

The Examiner has indicated that claims 19 and 20 are allowable in the independent form as currently presented.

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In view of the foregoing, early favourable consideration of this application is earnestly solicited.

Respectfully submitted,



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